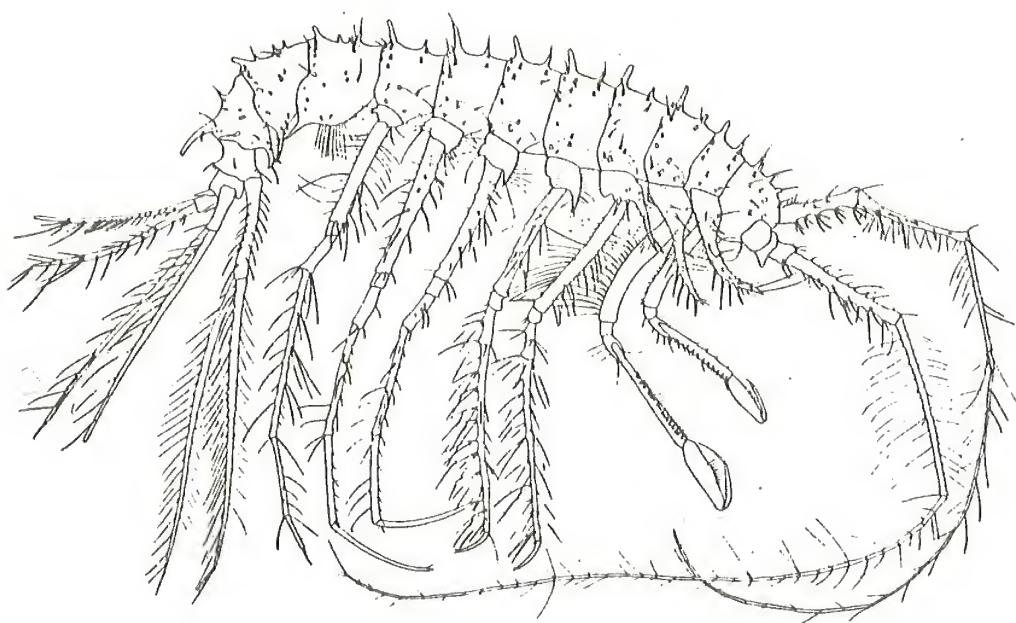
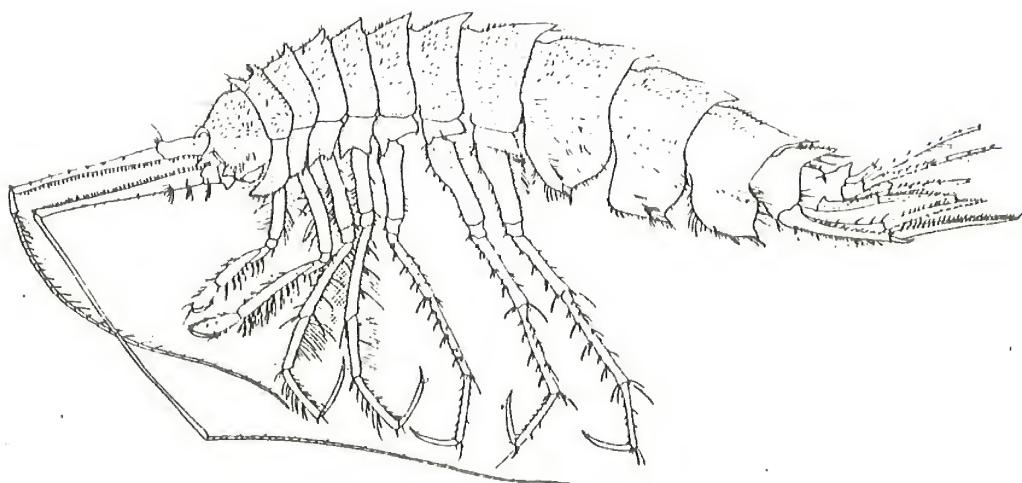


AMPHIPOD NEWSLETTER

12,



EDITED BY: Wim Vader, Tromsø Museum
PRODUCED BY: Les Watling, University of Maine

This issue of the Amphipod Newsletter has been put together in Maine. I would like to thank all who sent me either reprints or lists of papers for inclusion in the bibliography. I'm also very grateful to our Librarian, Mrs. Louise Dean who diligently checked each incoming journal issue for articles of interest. Ms. M. Bostwick and Ms. Lois Lane typed this issue after a courageous struggle with the handwriting of Wim Vader and myself.

This issue's cover is courtesy of M.H. Thurston. More cover illustrations would be greatly appreciated.

Judging from the responses received, those of you who receive your newsletter by air mail were the beneficiaries of reasonably rapid mail service. We now have 290 subscribers and the postage for the last issue was 420 dollars. Please keep the contributions and subscription money flowing to your regional editors. Also, not too much information has come my way for the "news" section. Let me urge the regional editors to canvas their members sometime around next July or August for news. Also, we don't hear much of the research activities of Asian and South American workers. Send me a synopsis!

I would like to draw your attention also to a notice in this issue concerning a new society (The Crustacean Society) for all workers throughout the world interested in any aspect of crustacean biology. The Society will publish a journal (to be edited by Dr. Arthur Humes, Marine Biological Laboratory, Woods Hole, MA 02543) beginning Jan-Feb 1981. If you have a manuscript, or plans for one, please send your idea or manuscript to Dr. Humes. I hope you will also be sufficiently interested in this society to join in its activities, and especially to nominate people as officers in forthcoming years.

We have to report a change in our staff of regional editors. Dr. Akira Taniguchi, although describing himself modestly in a recent letter as 'a mere layman in amphipod studies' has proved to be a most professional regional editor, and in fact, much of the present organization is based on his efficient examples. The new regional editor to Japan will be Dr. Hiroshi Morino.

Wim Vader will be in Bodega Bay until June and back at his permanent address in Tromso from mid-August. He is still very much interested in records of amphipod associations, especially those involving the anemones, Crustacea, echinoderms, molluscs and brachiopods.

Les Watling

25 May 1980

FIFTH INTERNATIONAL COLLOQUIUM ON GAMMARUS AND NIPHARGUS AND THIRD
INTERNATIONAL SYMPOSIUM ON GROUNDWATER ECOLOGY LODZ
- CZĘSTOCHOWA, POLAND - SEPTEMBER 1980

November 1979

2nd Circular Letter

Dear Colleagues,

We would like to inform you that we received above 50 responses from 16 countries to the 1st Circular Letter concerning our next meeting in Poland in 1980.

1. Some 35 papers were proposed. The responses show the interest for biogeography, ecology, physiology, population dynamics and systematics. Out of the topics for the informal discussion sessions the following were suggested by at least three respondents: a/ amphipod phylogeny and taxonomy, b/ subterranean fauna and diluvial glaciations, c/ terminology for groundwater ecology, d/ methods of sampling and of quantitative estimation of the production. We will arrange the discussion sessions for the above mentioned topics during the conference. For several other topics proposed by single persons we suggest the separate session where the authors of the proposals can provoke the discussion. The meeting of the so-called "Niphargus - groups" will be also scheduled.

2. The conference will last from 4th till 10th or 11th of September 1980: from Thursday till Wednesday or Thursday. A detailed schedule will be sent in next circular letters.

3. According to the suggestions of Blacksburg we have tried to find the possibility of printing the papers of our meeting in one of Polish international journals. We are happy to inform you that such a possibility does exist in Polskie Archiwum Hydrobiologii, that publishes in English, French and German. If you wish to publish your paper that will be presented at our conference in one monothematic volume of this journal, please, announce this wish along with at least provisional title not later than January 31st, 1980, both to K. Jazdzewski and to the following address:

Doc. dr habil. Ewa Kamler, Polskie Archiwum Hydrobiologii, Redakcja, Instytut Ekologii P.A.N., Dziekanów Leśny, 05-150 LOMIANKI, POLAND. In that case you will receive the form with rules and regulations for preparation the manuscripts that will be collected during the conference.

4. If you wish to have a letter of invitation, please, contact K. Jazdzewski, proposing at the same time its desirable formula.

5. Please, bear in mind that the deadline for sending abstracts is April 30, 1980. Titles without abstracts will not be accepted. Abstracts /in English, French or German/ should be written on one side of a single page. Abstracts should include: title in capital letters, name of author and affiliation, double-spaced text with free margins: 40 mm from the left, 15 mm from the right, 20 mm from top and from bottom. Abstracts should be sent to K. Jazdzewski.

6. We would like to recall you the account where the registration fee / 35 US \$ prior to March 31, 1980; 40 US \$ after that date / should be prepaid: Bank Hanlowy, ul. Traugutta 7/9, 00-067 Warszawa, R-k nr 342 - 1516-787, for: Min. N. Sz. W. T., Uniwersytet Łódzki, Komitet Organizacyjny V Int. Coll. Gammarus.

7. A 3rd Circular Letter will be mailed in April 1980. Included will be information on housing and conference accomodations and details on the programme and on the travel.

With regards

Dr. Andrzej W. Skalski
Director of the Museum
Muzeum Okregowe
Ratusz B
42-200 Czestochowa, POLAND

Dr. Krzysztof Jazdzewski
Assoc. Professor of Zoology
Zaklad Zoologii Ogolnej U.L.
ul. S. Banacha 12/16
90-237 Łódź, POLAND

P R E L I M I N A R Y A P P L I C A T I O N

for printing the paper in Polskie Archiwum Hydrobiologii

I wish to publish my paper that will be presented at the Vth Int. Coll. Gammarus/Niphargus and IIIrd Int. Symp. Groundw. Ecol. - in Polskie Archiwum Hydrobiologii.

The /provisional/ title of the paper is following:

.....
.....

NAME

ADDRESS

.....
.....

P R E L I M I N A R Y A P P L I C A T I O N

for printing the paper in Polskie Archiwum Hydrobiologii

I wish to publish my paper that will be presented at the Vth Int. Coll. Gammarus/Niphargus and IIIrd Int. Symp. Groundw. Ecol. - in Polskie Archiwum Hydrobiologii.

The /provisional/ title of the paper is following:

.....
.....

NAME

ADDRESS

.....
.....

News from Colleagues

Kathy Conlan: is working with E.L. Bousfield on west coast (Canada) amphipods, with emphasis on Corophioidea.

Eamonn Twomey: I am working for my doctoral thesis on Caprellids under the supervision of Dr. A.A. Myers. I hope to investigate population dynamics, behavioural ecology, systematics and functional morphology and have already commenced work with the scanning electron microscope. I would be interested to hear from others with similar interests.

Jean-Claude Dauvin: I work on dynamics of populations of Amphipoda-Ampeliscidae and dynamics of benthic ecosystems.

John J. Dickinson: As of April I will be doing a postdoc with E.L. Bousfield. During my stay in Woods Hole, I put together two reports on the gammarideans of the Middle Atlantic Bight and Georges Bank (U.S. east coast). They will be published in the NMFS Technical Reports Series.

Jeff Hughes: am presently writing a paper on Dogielinotus loguax Barnard from the Washington (State of, U.S.A.) coast.

Alan Myers: I have recently returned to Cork after six months in the South West Pacific, principally in Fiji where I collected gammarideans from coral reef and mangrove biotopes. I also collected in Western Samoa, Niue Island, Tonga, the New Hebrides and Solomon Islands. My aim is to produce a handbook for the identification of Fijian amphipods as my sponsors at the Institutte of Marine Resources in Suva have indicated that this would be of great help to them, and then follow it up with a broader study of S.W. Pacific gammarideans. Work also continues on Lembos with many new species, especially from the Pacific Islands and Australia, but also from elsewhere, still waiting on my shelves to be described. I am also working on Grandidierella from the Pacific and from the Gulf of Mexico, Aora from Australia and New Zealand, Leptocheirus from the Gulf of Mexico and Erichthonius world wide. Several interesting Irish amphipods are under study by myself and Dave McGarth, and of course my work on Mediterranean Isaeidae and Ischyroceridae for Vol. 2 of "The Amphipoda of the Mediterranean" continues.

James T. Carlton: My research interests are the biogeography, history, ecology and biology of marine and estuarine invertebrates accidentally transported by man around the world (via commercial oysters, shipping, algae with fisheries products, and other means). My doctoral dissertation at the University of California, Davis, considered the large exotic fauna (150+ species) on the Pacific coast of North America, including at least thirteen introduced species of bay-dwelling amphipods. I am currently devoting a large portion of my studies at W.H.O.I. to investigations of the non-native invertebrates of the Atlantic coast from Newfoundland to Cape Hatteras. An early stimulus for my work was E.L. Bousfield's recognition of Orchestia chilensis in San Francisco Bay (earlier described as O. enigmatica Bousfield & Carlton, 1967), a remarkable beach-hopper probably introduced in shingle ballast from Chile.

P.M. Taylor: I am working towards my Ph.D. studying the ionic regulation of Corophium curvispinum var. devium (Wundsch). I am also interested in the distribution of this species throughout the British Isles and Europe.

Traudl Krapp-Schickel: I've always been working at home (because of our 3 children), financially supported by research councils, and furnished with the necessary literature by my husband (Curator of Arthropoda at the Museum in Bonn), who also brought home my mail addressed to the museum. The new director of the Bonn Museum does not want me to receive mail via the museum, as I "do not belong to the museum". Please therefore write to our home address (see Address Changes), or if writing to a home address is impractical for you, send the mail to my husband and me together (Drs. F. & G. Krapp, Museum A. Koenig, Adenauerallee 150-164, D-53 Bonn, FRG).

Philippe Laval: I have just finished a review on hyperiid associations with gelatinous zooplankton, which was invited by the editor of "Oceanography and Marine Biology, Annual Review". It should be published in Volume 18, 1980.

REQUEST FOR INFORMATION

I am anxious to examine specimens of, and related to, the lysianassid genera, Thoriella, Chevreuxiella and Danaella. Material already available suggests the presence of several undescribed species, strong sexual dimorphism radical morphological changes during growth and bizarre adaptations to a bathypelagic existence. I shall be most grateful for the loan of any collections. Even single specimens will help.

Michael Thurston
Institute of Oceanographic Sciences
Brook Road
Wormley, Surrey
GU8 5UB England

I am currently investigating the life cycle and general ecology of the supralittoral talitrid amphipod, Orchestia traskiana, in the Pacific Northwest U.S.A. Except for D.E. Bowers' (1964) work on Orchoptoidea in California, most studies on the ecology of algal wrack fauna have been conducted in Northern Europe. Noteworthy are the investigations of Remmert, Strenzke, Backlund, Durkop, Dahl and Bock. If anyone has any further information regarding the population dynamics, physiological ecology and competitive interactions of algal wrack fauna, I would be most interested in hearing about it. Also, has anyone speculated on the energetic interactions between the supralittoral wrack environment and the subtidal? Despite the fact that it derives its nutritional base from the marine environment, one generally gets the impression that the wrack ecosystem is somewhat isolated from the strictly marine environment, being populated by essentially "semi-terrestrial" and terrestrial species. The progressive decay and eventual breakdown of algal drift, together with the fecal products of the wrack inhabitants, results in bottom layers that have the appearance of forest humus. Supralittoral amphipods appear to play an important role in this process. If this material is eventually washed into deeper water by the tides, it could prove to be an important energy source for subtidal benthic deposit feeders. If anyone has any ideas, suggestions or information regarding any of the points I have mentioned above, please contact me at the following address:

Helmut Koch
ES 429 - Arctic Research Lab, Huxley Office
Western Washington University
Bellingham, WA 98225

The Population Dynamics of an Intertidal Sandy-Beach Amphipod from the Washington Coast, by Jeffrey E. Hughes, M.S. Thesis, University of Washington, 1978

1. The amphipod Dogielinotus loquax Barnard (1967), a recently-described member of Pacific Northwest coastal infauna, is found in shallow sands within the mid-to-upper intertidal zone, where it often occurs in a relatively narrow band. It shares this habitat with only a few other macro-invertebrates.

2. A population of D. loquax was sampled from May, 1975 through August, 1976, in the vicinity of Ocean City-Ocean Shores, Washington. A stratified random sampling scheme was usually employed, and a total of three beach stations examined.

3. D. loquax is a mobile herbivore-detritovore that maintains an association with the relatively food-rich upper swash zone by way of its strong swimming and burrowing capabilities. A principal food source is the surf diatom Chaetoceros armatum. Behavior related to food resource availability was discussed as principally limiting the distribution of D. loquax in the intertidal.

4. A sustained segregation by size or sex was not noticed on the studied beaches.

5. D. loquax is an iteroparous species, with an average sex ratio of 1:1. Mean fecundity ranges from 8 to 32 eggs, depending on gravid female body length. Duration of egg development is strongly temperature-dependent, varying from 55 days at 8°C to 14 days at 20°C.

6. The size structure of the D. loquax population was monitored, using a leg segment as the measurement variable. A bivoltine reproductive cycle was exhibited: a generation recruited in spring produced in summer a generation that overwintered and would reproduce in the following spring.

7. The timing of peaks in reproductive activity (relative proportion of gravid females) and the entry of cohorts into the population was largely influenced by temperature-dependent rates of naturation and egg development.

8. Growth of cohort members recruited in spring and summer, 1976, was estimated by the probability paper method. Cohort mean specific growth rates generally decreased with increasing amphipod body size. The initial growth of the earliest-recruited cohort may have been retarded by the relatively lower temperature of April-May.

9. Abundance estimates for the spring recruitment (summer generation) indicated a relatively rapid numerical decline from July through August, 1976 (approx. 5% per day). Most of this mortality occurred before the amphipod had reached its maximal size. Recruitment to the 1976-1977 overwintering generation had commenced by this time.

10. Sources of mortality were discussed. Predation by shorebirds, particularly sanderling (Crocethia alba) was implicated as especially influential in the decline of the summer generation.

Ecology of Parathemisto libellula and P. pacifica (Amphipoda:Hyperiidea) in Alaskan Coastal Waters by Bruce L. Wing, Ph.D. Thesis, University of Alaska, 1976.

The planktonic amphipods Parathemisto libellula and P. pacifica coexist in coastal waters from southeastern Alaska (56° N) to the southeastern Chukchi Sea (70° N). Observations on distribution, reproductive cycles, diets, metabolism, and starvation tolerance contribute to understanding this case of congeneric coexistence.

Samples were collected monthly from September 1969 to October 1970 in southeastern Alaska, from May to September 1969 in the southeastern Bering Sea, and in September-October 1970 in the southeastern Chukchi Sea. Respiratory metabolism and starvation tolerance were studied in winter-caught amphipods from southeastern Alaska.

Both species consistently occurred above 300 m in southeastern Alaska. In the southeastern Bering Sea, their distributions were separate, with P. libellula restricted to an area where summer bottom temperatures were less than 8.0° C. The P. pacifica found in the Chukchi Sea were probably expatriated from the Bering Sea.

In southeastern Alaska, P. libellula has a 1-year cycle. Broods are released in early May. Juveniles initially live in the surface 50 m, but by late June (at a size of 10 mm) they migrate vertically. By late October they have a daytime depth of 200-300 m. Males mature in late winter at 19-21 mm and females 21-25 mm.

In southeastern Alaska, P. pacifica reproduces throughout the year with a strong peak in early May. Juveniles initially live in the surface 50 m. Adults and subadults migrate vertically to a daytime depth of 100-200 m. Summer growth is rapid, and maturity is attained in 6-8 weeks at a size of 4.5-6.5 mm. Generation time lengthens in winter to 8-12 weeks, and size at maturity increases to 6.0-7.0 mm. Diets of the two amphipods are similar. About half the food items were calanoid copepods, and 30% were compound-eyed crustaceans (primarily euphausiids and amphipods). Parathemisto pacifica were more cannibalistic than P. libellula.

The temperature coefficient (Q_{10}) for respiratory metabolism of P. libellula is 3-5 at temperatures below 5.0° C, and near 2 at temperatures above 10.0° C. At 7.5° C, the respiration rates for animals tested had a bimodal distribution--not all animals changed their metabolism at the same rate and/or temperature.

Respiration rate-weight relationships are not affected by temperature. Respiration rates are inversely correlated with salinity between 30.7% and 32.4%. This relationship may serve to maintain a constant metabolic rate during vertical migration.

The Q_{10} for respiratory metabolism of P. pacifica is near 2 at temperatures below 5.0°C; thus, P. pacifica cannot lower metabolic requirements during the winter as well as P. libellula.

Parathemisto libellula endured starvation for 56 days and P. pacifica for 36 days at 6-7°C.

Annual cycles of temperature and food in Alaskan coastal waters impose conditions outside optimum physiological ranges but within the tolerance of both species. Temperatures above 8.0°C may impose higher metabolic demands upon P. libellula than can be fully supported by the available food. Winter food may be inadequate for the metabolism of P. pacifica. Parathemisto libellula is better adapted to winters than P. pacifica, and P. pacifica better adapted to summers than P. libellula; consequently, in either time of year neither predominates long enough to exclude the other.

New Addresses

Kenneth A. Kimball
98 Elm St.
Danvers, MA 01923 U.S.A.

Kenneth H. Bynum
Dept. of Zoology
Wilson Hall 046-A
University of North Carolina
Chapel Hill, NC 27514 U.S.A.

Dr. Ahmet Kocatas
Dept. Biological Oceanography
Ege University
Bornova - Izmir
Turkey

Dr. John J. Dickinson
National Museum of Natural Sciences
Ottawa, Ontario
Canada K1A 0M8

Jeff Hughes
262 Granite St.
Quincy, MA 02168

Margaret Drummond
Dept. of Crustacea
National Museum of Victoria
71 Victoria Crescent
Abbotsford, Victoria 3067,
Australia

Dr. James T. Carlton
Environmental Systems Lab
Woods Hole Oceanographic Institution
Woods Hole, MA 02543 U.S.A.

Dr. Hitoshi Semura
Kashima Branch
Shimane Prefectural Fisheries Experimental
Station
Etomo, Kashima-cho,
Yatsuka-gun, Shimane Prefecture
690-03, Japan

Traudl Krapp-Schickel
Hoffmannstr. 7
D-5307 Wachtberg-Adendorf
BRD

Animaria Escofet
Friday Harbor Laboratories
Friday Harbor, WA 98250 U.S.A.

New Subscribers

*N.B.
McNamee*
Paul Shin
Zoology Dept.
University College
Galway
Ireland

Eamonn Twomey
Dept. Zoology
Prospect Row

Mrs. Kathy Conlin
National Museum Natural Sciences
Ottawa, Ontario
Canada K1A 0M8

Stephen Petrich
1837 Britton Drive
Long Beach, CA 90815

Dr. Bruce L. Wing
Northwest Fisheries Center-Auke Bay Lab.
National Marine Fisheries Service
P.O. Box 155
Auke Bay, AK 99021

Jean-Claude Dauvin
Station Biologique
Place George Teissier
29211 Roscoff
France

New Subscribers-cont.

P.M. Taylor
Dept. Zoology
University of Leicester
University Road
Leicester LE1 7RH
England

Allan W. Stoner
Harbor Branch Institution
RRL, Box 196-A
Ft. Pierce, FL 33450 U.S.A.

Uriel Kitron
Dept. Biology
University of California
Santa Barbara, CA 93106

BIBLIOGRAPHY

As usual, Claude De Broyer, Ireida Greze and Jan Stock have again sent lists of references. We are also very grateful to those of you who have sent reprints of their recent papers to Les or to me. Nevertheless, I fear that the bibliography this time will be more incomplete than usually: please let me know if you spot any omissions.

The review of Jenzen's innovative keys to the Danish amphipods and Lincoln's monumental work on the British Gammaroidae have to wait to A.N. 13.

Dr. Greze writes that the title of the journal of the 'Institute of Biology of the South Seas' published by 'Neukova dumke' from 1980 has been changed from 'Biologiya morya' to 'Ecologiya morye'. This is a very welcome change, since the journal of the 'Institute of Biology of the Far Eastern Seas' in Vladivostok also was, and still is, called "Biologiya morye".

I add a copy of a recent note in J. Paleontol. 53, 1979, 761 by Louis S. Kornicker on the use of question marks in taxonomic literature, and invite your comments. I am afraid I have not been very consistent in this regard on the bibliography of A.N., though my use has been closest to the AMNH guidelines.
(W. VADER)

THE QUESTION MARK IN TAXONOMIC LITERATURE

LOUIS S. KORNICKER

Department of Invertebrate Zoology, National Museum of Natural History,
Smithsonian Institution, Washington, D.C. 20670

The precise meaning of a question mark when used in conjunction with the name of a taxon often cannot be determined by the reader of taxonomic literature unless the publication containing the literature has regulations concerning the use of the question mark, and unless these regulations are known to the reader. As an example, I have listed in Table 1 conventions used by three different publications. As shown in the table, the conventions agree in some instances but disagree in others. An extreme example is the placement of the question mark in "*?Spirifer grimesi* Hall," which specifies that the entire assignment is

questionable in two of the publications, and that the generic assignment is questionable in the third publication. If a publication containing taxonomic literature has no rules concerning the use of the question mark, the reader may have no way of knowing the intent of the author's use of it. Therefore, either the placement of the question mark used in conjunction with taxonomic names should be standardized, or publications containing taxonomic literature should formulate regulations concerning the question mark, and these should be readily available to both author and readers.

TABLE 1.—Suggested position of the question mark when used with the name of a taxon in three publications.

	USGS ^a	AMNH ^b	NMNH ^c
Species questionably assigned to genus	<i>Spirifer?</i> <i>grimesi</i> Hall	<i>?Spirifer grimesi</i> Hall	<i>Spirifer?</i> <i>grimesi</i> Hall
Species doubtful, but assigned to correct genus	<i>Spirifer grimesi</i> Hall?	<i>Spirifer?</i> <i>grimesi</i> Hall	<i>Spirifer grimesi?</i> Hall
Entire assignment doubtful	<i>?Spirifer grimesi</i> Hall	<i>?Spirifer grimesi</i> Hall	<i>?Spirifer grimesi</i> Hall

^a Suggestions to Authors of the Reports of the United States Geological Survey, 6th Edition, 1978, by Elna E. Bishop, Edwin B. Eckel, and Others; John E. Eric, Coordinator. U.S. Government Printing Office, Washington, D.C.

^b Style Sheet for the Scientific Serial Publications of The American Museum of Natural History, 2nd Edition, Revised, 1953, by Ruth Tyler. The American Museum of Natural History, New York.

^c Smithsonian Style Manual, 1973, Anonymous. Smithsonian Institution Press, City of Washington.

MANUSCRIPT RECEIVED SEPTEMBER 2, 1978

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- X BARNARD, J.L., AND M.M. DRUMMOND. 1979. Gammaridean Amphipoda of Australia, Part IV. Smithson. Contrib. Zool. 269:1-69. [PLATYISCHNOPIDAE, n. fam. (type gen: Platyischnopus Stebbing); Key to eastern hemisphere genera of Platyischnopidae; Platyischnopus mam n. sp.; Tomituka n. gen. (type and only sp: T. doowi n. sp.); Yurrokus n. gen. (type and only sp: Y. cooroo n. sp.); Tittakunara n. gen. (type and only sp: T. katoa n. sp.); Indischnopus n. gen. (type sp: Platyischnopus herdmani), 2 spp.; Indischnopus capensis (K.H. Barnard), n. comb. UROTHOIDAE; key to Australian sp. of Urothoides; Urothoides kurrawa n. sp. U. waminoa n. sp.; U. makoo n. sp.; U. tondea, n. sp.; U. odernae n. sp.; U. mammarta n. sp.; U. mabingi n. sp.].
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Carineogammarus n. gen. (type sp: Eogammarus makarovi Bulycheva;
Gammaroporeia Bousfield 1979, diagnosed.)

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- ✗ KARAMAN, G.S. 1977. Contribution to the knowledge of the Amphipoda. '69. Revision of the Echinogammarus, genera-complex (fam. Gammaridae). Archiv bioloških Nauka Beogr. 27 (1975), 69-92. (In this paper the author synonymizes the following genera with Echinogammarus: Chaetogammarus, Homoeogammarus, Marinogammarus, Ostiogammarus, Parchomogammarus, and Pectenogammarus. Also the European species of Eulimnogammarus (E. anisogammarus, E. macrocarpus, E. obtusatus, E. toletanus) are removed to Echinogammarus. Comatogammarus is considered to be a synonym of Sarothrogammarus, and Rhipidogammarus of Neogammarus. Thus the following genera are retained: Echinogammarus, Eulimnogammarus, Fontogammarus, Longigammarus, Neogammarus and Sarothrogammarus. Sarothrogammarus contiguus n. sp. is named and Echinogammarus planicrurus redescribed).
- ✗ KARAMAN, G.S. 1978. Amphipoda from Skoder Lake and its drainage system. Cerh. int. Ver. Limnol. 20: 2579-2583.
- ✗ KARAMAN, G.S. 1978. Contribution to the knowledge of the Amphipoda 97. On three interesting species, Crangonyx floridanus Bous. 1963, C. parvimanus (Hol. 1903) and Orchestia tiberiadis Lar. 1883. Glas. Republ. Zaroda Zast. Prirode. Prirodnjackeg Muzeja Titograd II: 65-73. (Of these 3 species C. floridanus and Melita parvimanus are probably synonymous with C. pseudogracilis, while O. tiberiadis is a senior synonym of O. kosswigii Ruffo).

- ✗ KARAMAN, G.S. 1979. Contribution to the knowledge of the Amphipoda 92. Bogidiella chappuisi Ruffo 1952 and its variability with remarks to some other species (fam. Gammaridae). Poljoprivveda i Sumarstvo 25: 17-30. (B. minotaurus and probably also B. balearica are junior synonyms of B. chappuisi. B. skopljensis is discussed and an amended diagnosis of Bogidiella provided).
- ✗ KARAMAN, G.S. 1979. Contribution to the knowledge of the Amphipoda 93. New records of some Gammaridean Amphipoda from the Mediterranean Sea. Poljoprivreda i Sumarstvo 25: 47-67. (Deals with 28 Gammaridae s. l. Cheirocratus robustus is synonymized with C. sundevalli. Gammarellus carinatus is probably identical with G. angulosus. Elasmopus rapax serricatus and Megaluropus agilis massiliensis are given specific rank and other forms of E. rapax are discussed).
- ✗ KARAMAN, G.S. 1979. Stenocorophium bowmani, a new genus and species of the Family Corophiidae from the Palau Islands (Crustacea: Amphipoda). Proc. Biol. Soc. Washington 92(3): 580-588.
- ✗ KARAMAN, G.S. 1979. Two new species of the genus Idunella Sars, 1895 (Crustacea: Amphipoda) with remarks on the other species. (Contribution to the knowledge of the Amphipoda 94). Proc. Biol. Soc. Washington 92(1): 75-83. [Idunella bowenae n. sp., I. nagatai n. sp. (=I. chilkensis Nagata 1965), key to species of Idunella].
- ✗ KARAMAN, G.S., and J.L. BARNARD. 1979. Classificatory revisions in Gammaridean Amphipoda (Crustacea), Part I. Proc. Biol. Soc. Washington 92(1): 106-165. [ACANTHONOTOZOMATIDAE and PARAMPHITHOIDAE (evidently combined but not formally defined): Acanthonotozoma Boeck, n. syn. (includes Panoploeopsis Kunkel); Cypsiphimedia stegosaura (Griffiths), n. comb.; Epimeria Costa, n. syn. (includes Subepimeria Bellan-Santini); Epimeriella Walker, n. syn. (includes Eclysis K.H. Barnard); Iphimedia Rathke, n. syn. (includes Panoploea Thomson and Iphimediopsis Della Valle); Iphimediella Chevreux, n. syn. (includes Pariphimediella Schellenberg and Pseudiphimediella Schellenberg); Labriphimedia K.H. Barnard, n. syn. (includes Maoriphimedia Hurley). PLEUSTIDAE: Arctopleustes glabricauda (Dunbar), n. comb.; Dactylopleustes n. gen. (type and only sp: Parapleustes

echinoicus Tzvetkova); Tepidopleustes n. gen. (type sp: Parapleustes barnardi Ledoyer); Parapleustes corniger (Shoemaker) n. comb.; Parapleustes? euacanthoides (Gurjanova) n. comb.; Parapleustes gagarae (Gurjanova) n. comb. EUSIRIDAE: Paracalliofiella Tzvetkova and Kudrjaschov, n. syn. (includes Callaska J.L. Barnard). LILJEBORGIIIDAE: Idunella Sars, n. syn. (includes Ronconoides Ledoyer). AMPITHOIDAE: Pseudoamphithoides Ortiz, n. syn. (includes Amphyllodomus Just). GAMMARIDAE: Pontogammarus - group defined; key to gammarid genera in Pontocaspian Basin; Baku n. gen. (type and only sp: Pontogammarus paradoxus Derzhavin); Cephalogammarus n. gen. (type and only sp: Gammarus macrocephalus Sars); Kuzmelina n. gen. (type and only sp: Gmelina kusnezowi Sowinsky); Lanceogammarus n. gen. (type and only sp: Gammarus andrussowi Sars); Turcogammarus n. gen. (type sp: Obesogammarus turcarum Stock), 2 spp.; Yogmelina n. gen. (type sp. Gmelina pusilla Sars), 5 spp.; Yogmelina limana n. sp. (= Gmelina pusilla Carausu, non Sars); Sandro, n. gen. (type and only sp: Austroniphargus starmuhlneri Ruffo); Anopogammarus Derzhavin, revised, 2 spp.; Tadzocrangonyx n. gen. (type sp: Crangonyx schizurus Birstein), 2 spp.; Eogammarus Birstein, n. syn. (includes Spinulogammarus Tzvetkova); Amisogammarus Derzhavin (does not include Eogammarus Birstein, Spinulogammarus Tzvetkova); Eriopisa Stebbing, revised (includes only E. elongata (Bruzellius)); Psammogammarus Karman, revised (includes 6 species); Victoriopisa n. gen. (type sp: Niphargus chilkensis Chilton), 3 spp.; Giniphargus n. gen. (type and only sp. Niphargus pulchellus Sayce); Pygocrangonyx n. gen. (type and only sp: Metacrangonyx remyi Balazuc and Ruffo); Dulichiella Stout, revived (includes D. appendiculata (Say, 1818) and at least 4 others); Quadrivisio bousfieldi n. sp.; key to Quadrivisio; Nainaloa n. gen. (type and only sp: Melita latimerus Bonsfield); Gammarella Bate, n. syn. (includes Nuuau J. L. Barnard and Cottesloe J.L. Barnard); Tabatzius McKinney and Barnard, emended; Tabatzius muelleri (Ortiz), n. comb., n. syn. (includes T. copillius McKinney and Barnard); Afridiella n. gen. (type and only sp: Bogidiella somala Ruffo); key to genera of "bogidiellids."]

- ✗ KARAMAN, G. and S. RUFFO. ?1979. (Gammarus balcanicus Schäferno in the Italian fauna (Crustacea, Amphipoda)). Atti Mem. Accad. Agricolt. Sci. Lett. Verona. Ser. 6. 29: 77-90 (In Italian. Extensive description).
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- KOSTALOS, M.S. 1979. Life history and ecology of Gammarus minus Say (Amphipoda, Gammaridae). Crustaceana 37(2): 113-122.
- KRAFT, K.J. 1979. Pontoporeia hoyi distribution along the Keweenaw shore of Lake Superior, Michigan, U.S.A., affected by copper tailings. J. Great Lakes Res. 5: 28-35.
- ✗ KRAPP-SCHICKEL, G. 1979. Die Formengruppe um Apherusa bispinosa (Bate) (Calliopiidae, Amphipoda). Boll. Mus. Cir. Stor. Nat. Verona 5 (1978): 581-592 (An extensive discussion on the validity of A. chiereghinii (probably not specifically distinct from A. bispinosa). (Also description of A. vexatrix n. sp. from several Mediterranean localities.)

Last Minute Additions

- ✗ MILLS, E.L. 1980. One "different kind of gentleman": Alfred Merle Norman (1831-1918), invertebrate zoologist. Zool. J. Limn. Soc. 68:69-98. [another delightful and informative biography from the pen of Eric Mills.]
- ✗ THURSTON, M.H. 1980. Abyssal benthic Amphipoda (Crustacea) from the East Iceland Basin. 1. The genus Rhachotropis. Bull. Br. Mus. nat. Hist. (Zool.) 38:43-67. [R. thordisae n. sp., R. thorkelli n. sp., R. gislii n. sp., R. arii n. sp., and R. proxima Chevreux].
- ✗ THURSTON, M.H. 1980. Ibid. 2. Lephechinella and an allied new genus. Bull. Br. Mus. nat. Hist. (Zool.) 38:69-87. [L. helgii n. sp., L. grimi n. sp., L. skarphedini n. sp., Lephechinelloides n. gen. (type and only species: L. karii n. sp.)].

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THE CRUSTACEAN SOCIETY

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THE CRUSTACEAN SOCIETY
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IZ-NHB-W323
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Washington, DC 20560 USA

The Crustacean Society, a formal society organized to enhance information exchange among those interested in the study of any aspect of the biology of Crustacea, was initiated at the American Society of Zoologists' meeting in Tampa in December, 1979. One of the Society's goals will be the prompt publication of member's shorter manuscripts dealing with any aspect of crustacean biology.

A Council has been established to organize Society activities and has appointed working committees in the following areas: constitution, finance, membership, nominations, programs, and publication. Charter members, those joining in 1980, will vote on a constitution and officers later in 1980, and officers will be installed during our first business meeting to be scheduled during the ASZ meeting in Seattle in December, 1980.

The Society will seek to meet with the ASZ at its future meetings, and will sponsor contributed paper sessions, workshops, and symposia dealing with aspects of crustacean biology. The Society hopes to cosponsor the ASZ's Division of Invertebrate Zoology contributed paper sessions on crustaceans at Seattle, and, if possible, to sponsor a workshop on functional morphology of Crustacea at the Seattle meeting.

MEMBERSHIP

Membership in the Society is open to anyone interested in Crustacea. There are no prerequisites. Annual membership categories and dues are as follows:

Regular, North America	\$25.00
Regular, other than North America	\$30.00
Student	\$12.50
Founding (1980 only)	\$100.00
Sustaining	\$100.00

Memberships include subscriptions to the Society's journal, to be initiated in 1981. Payment should be in U.S. currency only, by check, bank draft in dollars, or international money order.

FOUNDING MEMBERS

One of the biggest problems facing the Society in its first year is its lack of assets. Recognizing this, the Council has established a special membership category, Founding Member, for 1980 only. Dues for Founding Members will be \$100 in 1980, at the regular rate thereafter. The Council urges those who can do so to become Founding Members.

CHARTER MEMBERS

Please note that Charter Members, all those joining the Society in 1980, are being asked to support the Society for this year without receiving the Society's journal. Memberships for 1981 and thereafter will include a subscription to the journal.